## NOTICE OF APPLICATION FOR TITLE V AIR QUALITY PERMIT

The South Dakota Department of Environment and Natural Resources (DENR) has received and reviewed the application for a Title V air quality permit for the following applicant:

APPLICANT NAME: NuGen Energy, LLC

FACILITY LOCATION: Marion, South Dakota

The Title V air quality permit will allow the operation of the following processes and units:

- Unit #1 Grain receiving, grain transfer, and storage bin loading. Operates at 1,008 tons of grain per hour and emissions are controlled by a baghouse. Elevator legs operate at 168 tons of grain per hour. Emissions are controlled by a baghouse.
- Unit #2 Grain milling. The grain is transferred from the day bin to one of four hammer mills each operating at 42 tons of grain per hour. Emissions are controlled by a baghouse.
- Unit #3 Fermentation system. The fermentation process occurs in seven fermenters processing 91,500 gallons of mash per hour and emissions are controlled by a wet scrubber.
- Unit #4 Four DDGS dryers. Each dryer is fired on natural gas, has a heat input capacity of 45 million Btus per hour and has a multi cyclone to collect product. Each dryer processes 46.5 tons of DDGS per hour. Emissions are controlled by two thermal oxidizer heat recovery boiler systems each operating at a maximum operating rate of 122 million Btus per hour heat input. The distillation process consists of the beer stripper, rectifier, side stripper, molecular sieve, condensers, and evaporators and produces 14,400 gallons of ethanol per hour.
- Unit #5 A cooling drum cools up to 46.5 tons of dried distillers grain per hour. Emissions are controlled by a baghouse. A portion of the exhaust gases may be passed through the DDGS dryer(s) in Unit #4.
- Unit #6 Dried distillers grain silo operates at 500 tons of dried distillers grain per hour. Emissions are controlled by a baghouse.
- Unit #7 Submerged truck loading rack operating at 36,000 gallons of denatured ethanol per hour. Rail car loading rack operating at 120,000 gallons of denatured ethanol per hour. Emissions from both racks are controlled by a flare operating at 12.4 million Btus per hour heat input.

- #8 Biomethanator Flare. Methane produced by the biomethanator is either routed to Unit #4 or the biomethanator flare operating at 6.4 million Btus per hour heat input.
- #9 Fire Pump 300 horsepower fired with distillate oil.
- #10 Industrial cooling tower.
- #11 Tank #1 A 200,000 gallon above ground storage tank used to store ethanol.
- #12 Tank #2 A 200,000 gallon above ground storage tank to will store ethanol.
- #13 Tank #3 A 200,000 gallon above ground storage tank to store gasoline.
- #14 Tank #4 A 1,500,000 gallon above ground storage tank to store denatured ethanol.
- #15 Tank #5 A 1,500,000 gallon above ground storage tank to store denatured ethanol

A review of this application indicates NuGen Energy can operate the ethanol production facility in compliance with South Dakota's Air Pollution Control rules and the federal Clean Air Act. DENR, therefore, recommends that the Board of Minerals and Environment issue an operating permit to NuGen Energy with conditions to ensure compliance with South Dakota Codified Laws (SDCL) 34A-1 and the federal Clean Air Act.

In accordance with the Administrative Rules of South Dakota (ARSD) 74:36:05:17, any person desiring to comment on DENR's draft permit conditions must submit written comments to the address below within thirty days of this public notice. Comments may be directed to the following mailing address: "Keith Gestring"; PMB 2020; Department of Environment and Natural Resources; Division of Environmental Services; 523 East Capitol, Pierre, South Dakota 57501. DENR will consider and address all comments submitted and issue a final permit decision pursuant to ARSD 74:36:05:18. DENR will notify the applicant and each person that requested notice or submitted written comments of DENR's final permit decision, including notification of any changes to the permit based on the comments.

Any person desiring to contest the issuance of this permit and have a contested case hearing must file a petition, which complies with ARSD 74:09:01:01. This petition must be filed either within thirty days of this public notice or, if that person submits comments on DENR's draft permit pursuant to the paragraph above, within thirty days of receiving notice of DENR's final permit decision. Upon receipt of a petition, DENR will schedule this matter for a contested case hearing before the Board of Minerals and Environment.

If no comments or objections are received within thirty days of this public notice, the draft permit becomes the final permit decision and the proposed permit will be submitted to EPA for review.

Copies of DENR's draft permit conditions and other information may be obtained from Keith Gestring, Engineer II, at the above address or telephone at (605) 677-6165 or from DENR's website at:

http://denr.sd.gov/des/aq/aapubnot.aspx

Steven M Pirner, Secretary
Department of Environment and Natural Resources

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